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REPORT OF EIGHTY OPERATIONS, PERFORMED BEFORE
THE MEDICAL CLASS OF THE COLLEGE HOSPITAL
DURING THE REGULAR SESSION OF 1891-2.

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The first five cases were operated upon during the last week of September, 1892.

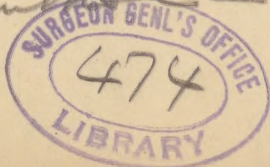
CASE I.—A patient, about twenty months of age, was brought to the hospital for retention of urine. An examination disclosed phimosis with a very small opening in the prepuce. After etherization an incision was made in the dorsum of the prepuce, which had to be dissected from the glans penis. Then the operation of oval amputation of the prepuce was completed. The bladder was found empty. It seemed that there had been complete suppression of urine. The kidneys resumed their function the next day, and the patient made a speedy recovery.

CASE II.—A male patient, about fifty years of age, had a very extensive fistula in ano, in fact, there were several sinuses going up outside of the rectum and under the planes of the gluteal fascia. The wall of the lower end of the rectum was cut through for nearly three inches upward. The hæmorrhage was very profuse, but was arrested by tampon. The patient had a subsequent operation.

CASE III.—A laborer had suffered from a compound comminuted fracture of a finger, followed by necrosis, and requiring amputation. A dorsal incision was made, and then an oval one, when the flaps were dissected up; then the finger was flexed to a right angle with the metacarpal bone, facilitating the disarticulation. A compress was applied between the flaps, thus arresting the hæmorrhage. The wound granulated and the case did well.

CASE IV.—A female, about thirty years of age, had suffered from morbus coxæ for a number of years. There were some fistulous openings about the left hip. After etherization these openings were thoroughly incised and the unhealthy wall of limiting fibrine was scraped out with a bone scoop. The surfaces were dressed antiseptically and good drainage was maintained. A tonic and supporting treatment produced a good result. The joint was not involved.

presented by the author



CASE V.—A laborer, about forty years of age, had occasionally suffered from constipation, was taken on Sunday night with obstruction of the bowels, which continued until the following Friday, when I saw him and advised his removal to the hospital for the purpose of an operation. He was in much distress, and an operation, though of doubtful utility, was the only thing that promised any help. The cause of the obstruction was not determined. As soon as he was taken to the hospital in the ambulance I performed laparotomy. Many feet of the small intestine had a very dark appearance, caused by severe strangulation. I soon found what appeared to be a band of adhesion fastening down and obstructing the ileum. Ligation and severance of this showed that it was the end of a diverticulum of the ileum, which was about three inches in length. The apex of the pouch pointed downward, the base of origin being above. The *neck* of intestine below the origin of the pouch was quite small, being an obstruction under any circumstances. I amputated the diverticulum at its base and closed it with ligature and sutures. After the removal of the strangulation the intestine did not recover its normal appearance. As the patient was suffering from exhaustion and shock appearing to be failing in strength, I made all haste to close the abdomen, and got him in bed as soon as I could. The best opinion I could form was that he would have died in a few hours without an operation, and with the operation he lived until the next day, not having completely rallied from the shock caused by the strangulation, which was increased by the operation. I have no reasonable doubt as to the opinion that this patient would have been saved by an early operation.

CASE VI.—A groceryman, about thirty-nine years of age, had a severe injury of his left shoulder, and in a few months had developed an osteo-sarcoma of the upper end of the left humerus. It was very painful and grew rapidly, being accompanied by much depression and considerable loss of weight. The left hand and forearm were completely useless. The patient was failing fast, and, from all appearance, could not live long. He was anxious for an operation for the removal of the entire new growth. The following were the steps of the operation, which was performed October 1, 1892: 1. The ligation of the subclavian in the third part of its course, and at the same time the ligation of the transversalis colli artery. 2. The exposure and amputation of the left clavicle at the juncture of the inner and middle thirds. 3. An incision extending to the spine of the scapula, and thence downward to its inferior angle was made. 4. Then the posterior border of the

scapula was detached, and this bone was cut from the serratus magnus and the subscapularis muscles. 5. Next, the soft parts were severed with the knife, under and across the arm-pit, completely separating the upper limb, the scapula and the outer two-thirds of the clavicle from the body. 6. As a precautionary measure three or four ligatures were applied, and the wound was cleaned off by means of a pair of scissors. 7. The flaps were large enough to cover the entire surface of the wound, and were brought together and stitched in place; a drainage-tube was carried through under the flaps from the anterior to the posterior edge of the opening. This patient made an excellent recovery and has since returned to his business. He regained all the weight he lost. It may be remarked that the operation took one hour and thirteen minutes from the beginning of the administration of ether until the completion of the dressing.

(The cases from the sixth to the fourteenth were operated upon from October 6 to October 15, 1892.)

CASE VII.—A female, about thirty years of age, had suffered from disease of the left hip for a number of years. A painful swelling appeared over the great trochanter. The use of an exploring needle proved the existence of a pus cavity. A free incision, followed by scraping out the wall of limiting fibrine, as well as by disinfection, enabled the patient to make a good recovery.

CASE VIII.—A laborer had inflammation of the cells of the mastoid process, followed by suppuration. The soft parts were freely incised. Linear osteotomy was then performed, evacuating the pus. The patient recovered under antiseptic treatment and the use of tonics and nutrients.

CASE IX.—A laborer, about fifty years of age, on October 6, 1891, walked into the hospital, having an extensive compound comminuted fracture of the skull in the right temporal region. He told his friends who came with him to wait outside for him, as he would be out in a few minutes all right. He did not seem to suffer much from concussion or shock. After etherization and exploration of the wound it was found that the pericranium had been separated from the fragments. Some small pieces were removed and then the depressed portions of the skull were elevated, when it was found that the main fragments were detached from the dura. In all about two inches square had to be removed, leaving a large opening through which brain substance oozed, the dura being much lacerated. It was evident that the wound had become infected to such an extent as to prevent its being made aseptic.

This patient died in a few days from septic meningitis, complicated by the effects of a serious injury.

CASE X.—A laborer, about forty years of age, had his right leg crushed by the wheel of a beer wagon. Both bones were comminuted and the fracture was compound. The accident occurred in June, 1891. An attempt to save the limb had failed. In October the patient was failing, on account of an osteo-myelitis, accompanied by elevation of temperature. On consultation it was decided to amputate at the knee-joint or above. The following were the steps of the operation: An incision from the head of the fibula directly downward three inches; an incision from the base of the tibia on the opposite side of the leg, also directly downward; a transverse incision in front, making the flap over two-and-one-half inches in length; dissecting up the flap and cutting through the ligaments of the knee-joint; cutting the posterior flap over three inches in length by means of an amputating knife; ligation of the blood-vessels, and excision of the end of the nerve; approximating the edges of the flaps by beginning in the middle of their edges. The knee-joint was filled with fluid blood, which, doubtless, was extravasated at the time of the injury. There was some erosion of the cartilage on the lower end of the femur. The drainage-tube was removed in a few days. The patient improved rapidly, yet the recovery was delayed by the formation of sinuses. Finally, under ether, the sinuses were thoroughly laid open, and in a short time the patient left the hospital as well as ever.

CASE XI.—A laborer, about fifty years of age, had an oblique inguinal hernia of the right side, which came down from time to time, and which he was in the habit of reducing. On examination, it was decided to operate. After anæsthesia, every preparation having been made for herniotomy, taxis was made in the following way: The hernial tumor was grasped by the right hand, making compression and some traction; the finger and thumb of the left hand supported the soft parts around the neck of the sac to keep them from spreading out over the ring; part of the contents was felt going back into the abdominal cavity; then the neck of the sac was liberated, so as to permit its entire contents to be reduced. This method of reduction has, in my practice, succeeded when others have failed. And I would recommend it.

CASE XII.—A patient, nearly sixty years of age, had been treated by me the previous year for severe compound fracture of the leg. After many months the patient could walk; but there was more or less necrosis of the broken ends of the fragments. Under an anæsthetic, the necrosed and necrotic bone was thoroughly chiseled out.

The prospect of saving the limb was not very good. The patient was told that an amputation might be necessary. The wound healed kindly in a few weeks; there was no apparent tendency to further necrosis; the patient left the hospital in good spirits.

CASE XIII.—A young man had a sebaceous cyst on the right side of his neck. After an incision, the wall of the cyst was found so thin that it was necessary to evacuate it before dissecting it out. The wound cavity was wiped out with a piece of sponge saturated with a mixture of equal parts of carbolic acid and glycerine. The repair was by granulation.

CASE XIV.—Captain W., a seaman, over fifty years of age, in the month of June, 1891, had a cartridge of dynamite explode under the heel of his right boot. The sole of the boot was bent upward, but not torn at any point. After its removal, it was found that there had been a compound comminuted fracture of the os calcis, involving the astragalus. There was a large wound in the bottom of the heel, into which the finger could be inserted. It was thought best to make an attempt to save the foot. He was treated on a thorough antiseptic plan from the time of the injury until the fifteenth of October, when I amputated the leg about the middle. The posterior flap was transfixed and the anterior flap was made from without inward. The marrow of the tibia bled profusely. I was obliged to use a large number of suture-ligatures, putting them in by means of curved needles. The tissues of the stump, as it turned out, were already infected. After eight or ten weeks of careful treatment a good result was reached.

CASE XV.—A sixteen-year-old boy, one year before, had a very crooked leg straightened by me, with an extensive osteotomy, which will be described in another place. The pieces of the tibia were wired together with a heavy wire, such as is employed in suturing the fragments of a broken patella. Union had taken place, but there was a tendency to necrosis. I made an exploration, and found the wire suture the cause of the necrosis. I removed the wire which was as bright and perfect as when first used. The necrotic bone was scraped out. Recovery soon took place, and the patient was in time ready for an operation on the other leg. This operation was performed some weeks after.

CASE XVI.—Operation performed October 16th. A sailor, forty-five years of age, had a fistula in ano. A grooved director passed through the fistula into the rectum enabled me to push the point of the blade of an angular scissors along the groove and thus cut the soft parts so as to expose the cavity of the original abscess. The grooved director was pushed into every pocket, of which there were

several, and then each one was thoroughly laid open. The old wall of limiting fibrine was scarified and scraped out from the bottom. Thorough disinfection was followed by packing the cavity with iodoform-gauze. The more thorough the operation, the sooner will there be a desirable result. This case followed this practical rule.

CASE XVII.—A native of Wales, thirty-eight years of age, had an incised wound of the throat, made transversely just above the hyoid bone, so that one finger in the mouth and one in the wound would meet. The patient was somewhat under the effects of stimulants, and so was partly insensible. With a small curved needle I sutured the mucous membrane as thoroughly and completely as possible, and then with a large curved needle I closed the entire wound, the sutures going well down to the deep sutures. An aseptic dressing completed the operation. The administration of an opiate was followed by a long sleep. There was primary union of the entire wound, and the patient had a rapid recovery. Operation performed October 15th.

CASE XVIII.—A man, twenty-two years of age, fell from the front platform of a street car, and the car-wheel ran over his right foot, in the region of the heads of the metatarsal bones. I told the man I would save all I could of his foot and leg; it was with the understanding that I should use my best judgment as to what ought to be removed when I got him under ether. In a few hours, when I was prepared to operate, I found the foot becoming gangrenous. After the application of the tourniquet, I incised the foot, and at once saw that the amputation must be through the leg. I amputated in the upper part of the lower third of the leg by means of circular flap. A point of special interest was this: The skin of the stump was raised by "traumatic blisters" quite extensively, showing the severity of the injury, and demonstrating the fact that the amputation of the foot was proper; the blisters appeared to threaten the integrity of the flaps. Yet in four or five weeks the patient was discharged from the hospital in good condition. Operation performed October 19th.

CASE XIX.—A. B., sixteen years of age, had an unsightly scar on front of his neck, the result of a tubercular abscess. After the etherization, the entire scar was dissected out, and the sides of the wound from the bottom were brought together with aseptic silk sutures. Primary union took place, and the result seemed to be very excellent. At the end of a week the patient was discharged. In about four weeks he returned with the wound of operation open and suppurating. It did not appear to be wise to operate again,

and so the treatment was directed to healing the ulcerating surface, which was brought about in five or six weeks. Operation performed October 20th.

CASE XX.—A gentleman, forty years of age, was shot in the right side of the head at the middle of the bone of the anterior fossa of the skull. He was suffering severely from concussion of the brain and from shock. His injury was inflicted October 21st by himself in a state of temporary derangement. He was put under the influence of ether; an incision was made down to the ball, which was flattened out by the resisting bone. The skull was indented where the ball struck, and there were lines of fracture radiating in various directions. The impact of the ball had been over the line where the base of the skull meets the side of the skull, thus preventing penetration. I did not think it advisable to trephine, and dressed the wound without closing it. The patient was removed from the hospital by his friends. He made an excellent recovery.

CASE XXI.—R. A., six years of age, had tuberculosis of right knee, following morbus coxæ of the left side. I exsected the upper end of the left femur the year before. On October 21st I exsected the knee which was extensively involved. In addition to the removal of more bone than usual, some sinuses in the soft parts were scraped out. It was very desirable to save the right limb, on account of the disability following the previous operation. The case did not do very well, and for some weeks an amputation of the thigh was under consideration. Four months after the operation, the general health as well as the local condition, was much improved. The medicines given were carbonate of lime in five-grain doses and the syrup of iodide of iron in doses of five to ten drops.

CASE XXII.—J. M., æt. forty, had suffered for a number of months from an abscess of the face; it had been opened several times; it continued like a sinus; it was opened by a free incision; and the indolent wall of limiting fibrine was thoroughly scraped out with a bone-curette; with the aid of tonics accompanied with antiseptic dressings, the recovery was rapid.

CASE XXIII.—O. H., æt. fifty-five, had an extensive infective inflammation of the right hand, beginning in a slight injury. When he came under my observation his hand was very much swollen and very painful. Free incisions gave some relief. The bones of the middle finger became necrosed, and the finger was amputated, the wound being left open so as to facilitate drainage. Subsequently incisions were required in the hand from time to time. Recovery was very slow; six months after the operation he could not use his hand to any great extent.

CASE XXIV.—October 28th, a girl, *æt.* six months, with hare-lip and projecting intermaxillary bone, was operated on. The soft parts were cut from the bone on either side; the intermaxillary bone was pushed backward by means of forcible pressure of the thumbs; the edges of the fissure of the lip were cut off from above downward, except at the border of the lip; they were held by my artery forceps until the cut edges of the lip were brought together with sutures; they were then trimmed off, so as to make a moderate projection downward, when they were finally adjusted. This case did well, the parts uniting by primary union. In these cases I do not use an anæsthetic.

CASE XXV.—M. G., a boy, *æt.* seven years, was admitted November 3d, after having stepped upon a pointed piece of wood. A longitudinal incision was made in the bottom of his foot, extending both ways from the punctured wound. The exploration enabled me to remove some small slivers and dirt, and also to make the wound aseptic. He made a rapid recovery.

CASE XXVI.—A married woman, *æt.* thirty-six years, was admitted first week in November, having strangulated femoral hernia of left side. Several attempts at reduction had been made during the day, and had failed. I saw her about midnight and operated, being assisted by Drs. Lewis and Cochran. The hernia was a small enterocele, with a very tight constriction of the neck of the sac. The intestine was much discolored, but the circulation seemed to return slowly, after cutting the constriction. It was deemed best to make reduction. I tied the neck of the sac as high up as possible, and then exsected the entire sac; I closed the wound with deep sutures, and obtained primary union. This patient was discharged from the hospital at the end of ten weeks, having a radical cure.

CASE XXVII.—A girl, *æt.* about twenty years, had an in-growing toe-nail; after anæsthesia, I split the nail with a pair of angular scissors, one blade having a sharp point; then I carefully avulsed each half of the nail in such a manner as to leave no portion of the "root" to grow again.

CASE XXVIII.—This case was one of phimosis of a six-year-old boy. In these cases I perform an oval amputation of the prepuce. A longitudinal incision is made from the narrowed orifice along the dorsum of the prepuce through all the soft parts down to the glans and upward to the sulcus. The corners of the flap are cut off obliquely, and the incisions meet on the lower part of the prepuce. For the most part I use one continuous suture and fasten the ends of it together on the dorsum. This suture is a small catgut ligature

which is soon absorbed, not requiring removal. It generally controls all hæmorrhage. I prefer this operation to circumcision. I have never known it to be followed by contraction of the scar, so as to require a second operation.

CASE XXIX.—A man, æt. fifty years, came before the medical class November 16th, having a sub-coracoid dislocation of the right humerus. As a rule I give an anæsthetic for two reasons: to avoid injury to nerves and blood-vessels of the axilla, such as may follow manipulation of the limb when the muscles are irritated and unrelaxed; to facilitate the reduction which, under an anæsthetic, is readily accomplished in the following manner: Put a small pillow in the axilla and place the stockined foot upon it, and then pull on the limb downward, outward and backward, and when the head of the bone is reduced carry the forearm and arm across the front of the chest and carefully and firmly fasten them there with a bandage.

CASE XXX.—B. F., aged sixty-one, came to the hospital the first week in November with a serious compound and comminuted fracture of both bones of the left leg near the ankle-joint. Several hours had elapsed from the time of the accident till his admission to the hospital. I removed the loose pieces of bone and excised the broken ends of the fragments, and, after as complete disinfection as possible, put the limb in a trough splint made of wire-cloth. Every effort was made to prevent and arrest sepsis. The soft parts had been much bruised and to a considerable extent devitalized, so that they were in a condition to be seriously invaded by infection. In two or three weeks the limb became greatly swollen, fever and delirium having supervened. The infection could not be arrested, and the patient was failing day by day. In order to give him a possible chance for his life I advised an amputation of the thigh, and my advice was sustained by my colleagues. Here I may mention that this patient, at the time of the accident, received a fracture of the right forearm and had his right humerus comminuted at the junction of the lower and middle thirds. On December 2d I amputated just above the middle of the thigh, making antero-posterior flaps by transfixion. The soft parts were very much infiltrated. The bleeding points required a number of suture-ligatures. The soft parts separated from the bone for a distance of an inch; this projecting end of the femur was cut off. This patient improved in every way after the operation. He was discharged from the hospital in the first week of April, 1892.

CASE XXXI.—December 2, 1891, G. H., aged twenty-eight years, came to my clinic, having a hard swelling in the calf of the left leg.

It had come on spontaneously during the previous week. The patient did not give any history of injury. The signs of inflammation, as well as those of a tumor, were absent. I gave the patient ether and then cut down upon the swelling and found it was an hæmatocele, containing about one-half pint of blood which had for the most part coagulated. The cavity was cleaned out and disinfected. The patient made a rapid recovery.

CASE XXXII.—A sailor, aged twenty-five years, had superficial necrosis of the right side of the lower jaw. The dead bone was chiseled and scraped away. The general treatment was antisyphilitic and the local was antiseptic. He made a rapid recovery.

CASE XXXIII.—S. C. B., aged thirty-five years, had received a pistol-shot wound of the middle joint of the left little finger ten days before, the 2d of December, 1891. He requested an amputation, "as he had tried to save the finger and failed." It was a case for amputation of the finger. He declined to take an anæsthetic. I made an oval amputation and cut off the head of the fifth metacarpal obliquely, so as to give him a better shaped hand. He did not remain in the hospital, saying he was going to Boston that evening. I have not heard of him since.

CASE XXXIV.—C. H. R., a laborer, aged forty-five years, had been operated upon sometime previous for extensive fistula in ano. Some diverticuli going up under the fascia of the glutæus on the right side required opening. The operation obliterated the last traces of the sinuses. It is not possible to promise a patient a complete cure with one operation. Sometimes a subsequent operation is required. In general one operation may cure the patient. Yet it is well for the surgeon to remember that a pocket of suppuration may have so small an opening as to escape all reasonable exploration. And it may be that a new sinus may be developed.

CASE XXXV.—J. F., a boy, aged thirteen years, had marked talipes equinus on the right side with atrophy of the foot and leg. The foot was slightly turned in. I advised an amputation, but the parents would not consent. On consultation, it was thought best to make an exsection. The head of the astragalus was prominent in front, and I made an incision over it, separating the soft parts. By forcibly pushing the anterior portion of the foot backward and at the same time seizing the astragalus with the lion-jawed forceps, the bone was enucleated and removed. The foot could not be reduced to place. Then I cut the plantar fascia, which permitted some straightening of the foot. Then I cut the tendo Achillis, but even then the foot remained obstinately out of place. And then I chiseled off the upper part of the os calcis until, with much force, I reduced

the foot, but it was considerably in front of its normal position, in fact, the leg came down upon the posterior end of the os calcis. It still occurred to me that an amputation would be better than any exsection. The foot was kept in splints for a week and opiates given to prevent pain. The object was to maintain the reduction.

CASE XXXVI.—J. M., a laborer, aged forty years, had a large inguinal hernia of right side. It had become strangulated, and appeared to be irreducible. He came to the College Hospital for treatment December 9, 1891. I made an effort to reduce the hernia, but did not succeed, the taxis causing severe pain. I made preparations for herniotomy and gave him ether. Then I tried taxis again. I seized the hernial tumor with my right hand and made gentle traction, compressing the contents of the sac, and at the same time taking hold of the neck of the hernia with the fingers and thumb of my left hand. I felt some of the contents of the intestine go back with a distinct gurgle. Then I followed up the moving structures with my right hand, keeping them from overlapping the external ring with my left hand. In a few moments the entire hernia was reduced. A pad and bandage were applied, and the patient was discharged from the hospital in four or five days.

CASE XXXVII.—L. B., an Italian laborer, aged forty-five years, while fifteen miles at sea in a tug, had a serious compound fracture of the left leg near the ankle. He was taken into the cabin and had the wound stuffed with cloths and old handkerchiefs that were dirty and filthy. The tug came to shore the same day, December 9, 1891, and the patient was brought to the College Hospital, where I saw him and amputated his leg four inches below the knee-joint. The most thorough antisepsis was observed during the operation, every care being taken to prevent any new infection, though it was very certain that he had already become infected. The next morning, some ten hours after the operation, he had a severe chill, accompanied by high temperature. The case soon developed into erysipelas of unusual severity, which affected the general surface of the body. The case went along very badly, although the local conditions were not severe. The patient died December 22, 1891. It is certain that this patient was infected by his treatment before coming to the hospital.

CASE XXXVIII.—December 14, 1891, J. H., a boy, aged seventeen years, had a pistol-shot wound of right side of back. The ball passed through the ninth rib and entered the lung, causing the patient to expectorate bloody sputa. Under ether the wound was

enlarged and explored, the splinters of bone being cut away. The ball could not be found. The wound was disinfected as far as possible. The patient made a rapid recovery.

CASE XXXIX.—December 16, 1891, J. B., aged seventeen years, was operated upon for tubercular testicle of the right side. There was considerable fluid in the tunica vaginalis. The spermatic cord was ligated high up in two portions by transfixion. The testicle had undergone cheesy degeneration, the internal portions having broken down. The disease began in the visceral tunic and extended inward to the deeper parts of the testicle. The entire wound was closed with deep sutures, bringing about primary union in a few days. This method of closing the wound after excision of the testicle I have often employed.

CASE XL.—This patient, aged twenty-three years, a Russian, had large and troublesome varicose veins of the left lower limb. The internal saphenous was prominent on the thigh, and the branches were numerous on the leg. I made a subcutaneous ligation with curved needles, armed with catgut, one needle going over the vein and the other under it. A branch of the vein was punctured, and there was some bleeding until the ligature was tightened, when it ceased. The venous branch was under the saphenous vein. The case made a good recovery in about ten days. This patient did not take an anæsthetic.

CASE XLI.—W., aged seventeen years, had a large abscess of the thigh on its inner aspect. An exploring needle was used to make sure of the existence of pus. The abscess was freely opened and washed out with a 1 to 1000 solution of bichloride. The recovery was rapid.

CASE XLII.—A patient, about sixty years of age, had his right superior maxilla removed a year and a half before for malignant disease, and was admitted to the hospital for a recurrence of the disease in the right side of the inferior maxilla. On January 6, 1892, I ligated the right common carotid at the point of election, for the purpose of diminishing the supply of blood to the affected structures. The ligation was performed in about fifteen minutes, the patient behaving well under ether. On the third day after the operation the patient got up and went about the ward, contrary to his strict orders. He became paralyzed in his left side and had to be put in bed, where he remained for about two weeks. In the meantime the paralysis disappeared; then he got up again, but had no further trouble, everything going on well. In a few weeks more the superintendent of the hospital gave him employment. The operation inhibited the progress of the disease.

CASE XLIII.—Mrs. S., aged sixty-nine years, had a very large cancer of the right breast, which had been growing between four and five years. She was very large and corpulent, and not very strong. The cancer seemed to be just ready to break down. There did not seem to be any involvement of the axilla. In any case the object in an operation was only palliative. I performed what I call the rapid operation, which consists in the removal of the breast, without stopping to tie any cut blood-vessels, the bleeding being checked by pressure. After the removal of all apparent traces of cancer I put in deep sutures, which act as ligatures, and then bring the cutaneous edges together with superficial sutures. A few days after the operation this patient had a very severe attack of acute jaundice, which delayed the repair to some extent. This complication subsided under appropriate treatment, and the patient did well. Soon after the operation I began the use of arsenic bromide, giving one-fortieth of a grain after each meal.

CASE XLIV.—An immigrant, aged about eighteen years, had an inflammation of the left knee-joint, which did not yield to ordinary treatment. He had tubercular deposits in both lungs. The affection of the knee was a rapidly developing arthritis. Under ether I made a free incision on both sides of the knee, and explored and disinfected the joint. There was necrosis of the posterior wall of the patella as well as necrosis of the lower end of the femur and the upper end of the tibia. I passed a drainage-tube through the knee-joint for the purpose of drainage and daily disinfection. The case did well for five weeks, the patient being quite free from pain. Then the soft parts about the knee began to proliferate quite rapidly, causing very considerable swelling. The patient grew weaker from day to day. With the hope of prolonging life I amputated his thigh. This was about two months after the first operation. Then the patient improved for a time. This was only temporary. His death occurred from exhaustion, due to tuberculosis of the lungs.

CASE XLV.—W. H., aged forty-three years, January 10, 1892, had his head caught between a heavy barrel and the wheel of a truck, almost completely crushing the skull. On the day of his admission to the College Hospital I removed about six square inches of loose bone from the right temporal region and incised the dura in order to let out a large collection of blood which was partly clotted. Some of the brain oozed out, the substance having been bruised to a diffuent mass. A drainage-tube was inserted into the brain for the purpose of preventing any accumulation inside the dura, and the wound of the scalp was closed in such a way as to

permit the free escape of the blood which was slowly oozing. Every possible antiseptic precaution was taken, the scalp having been extensively shaved and disinfected. The patient never fully rallied from the concussion and shock of the injury. He slowly became exhausted and died on January 24, 1892.

CASE XLVI.—J. F., whose left leg had been previously straightened for deformity, was operated upon January 13, 1892, for the purpose of removing an angular deformity of the right leg, which existed near its middle. This operation was similar to the one performed the year before, only it was done in half an hour, while the other required an hour. In the case of this leg the fibula had become, as it were, fused with the tibia, making them quite like one bone. After the exsécion of nearly four inches of bone, the two fragments, for such they were, could be quite accurately fitted and wired together. The wire was such as I use in suturing the fragments of a broken patella. In other respects also the treatment was the same as before, with this difference: the wound was closed with deep sutures. The repair of this leg was with more speed than that of the other. This patient was discharged from the hospital May 6, 1892, when he was beginning to walk quite well.

CASE XLVII.—J. Mc., a school-boy, aged fourteen years, had been treated for tubercular glands in the right submaxillary region for two or three months, with some improvement. On June 14, 1892, I removed them, and found the submaxillary gland somewhat enlarged, probably from simple irritation. I did not remove it. After some weeks, this gland was only slightly larger than normal. The right side of the face became somewhat swollen or rather "puffy." The general health became quite as good as ever.

CASE XLVIII.—J. H., a laborer, aged seventeen years, had his right femur broken about five years prior to June 20, 1892, when he had necrosis at the seat of the repair, which was just below the middle of the bone. Rest and nursing made much improvement; I gave him ether, cut down, and scraped the necrotic bone, when repair went on more rapidly. I have often seen necrotic and caseous bone improve greatly under rest, nursing and a regular diet.

CASE XLIX.—Wm. M., a sailor, thirty-seven years of age, was admitted to the College Hospital January 25, 1892, having a strangulated inguinal hernia of the right side. The hernia was of large size, and had been severely contused by persistent efforts made to reduce it; in fact, he was suffering from shock, and the pain was great. The case was considered serious, and the result of an operation uncertain. After opening the sac, I found a large quan-

tity of omentum, which had been contused so as to contain in its folds considerable blood. The exposed omentum had been twisted into several dependent portions; there was a small quantity of intestine out, and it was readily reduced. The spermatic cord had been dislocated from its normal place, and was entangled in the omentum from the testicles upward to the abdominal cavity. The protruding omentum was quite irreducible; I ligated it in three parts, one of which contained the entangled spermatic cord; another ligature was put on the spermatic cord just above the testicle; then the entire omental mass was cut away, and the stump put just inside the canal. The sac was dissected up close to the peritonæum, and the neck of it was tied with a strong catgut ligature, and the entire structure was cast off. The wound was closed with deep silk sutures, care being taken to include the ligated part of the sac. It would have been impossible to close the canal if the spermatic cord had been left. The already atrophied testicle was left *in situ*. The wound healed by primary union. The result is a radical cure.

CASE L.—A man, fifty years of age, January 26, 1892, was knocked down upon his face and hands by the falling of some bags of rice, and had the end-bone of his left thumb dislocated inward. Under anæsthesia I made the reduction in the following manner: I bent the end-bone inward so as to meet the next bone at a right angle; pushed the base of the bone outward through the rent in the capsule, and then straightened it out, when it resumed its normal position with a “click.”

CASE LI.—B. M., laborer, twenty-four years of age, had an ingrowing toe-nail on right great toe, very painful, making him lame and incapacitating him in his business. On January 24th I operated: I separated the soft parts from the root and sides of the nail with a knife; then I pushed the sharp-pointed blade of an angular scissors under the nail down to the root, and split it in two; one jaw of a strong forceps was pushed under the cut edge of each half of the nail, when it was firmly grasped and carefully torn off so as to leave no portion of edge; this must be done, inasmuch as the nail will grow again, if any of the root is left, and that will require another operation. I have performed a large number of operations of this kind and have never had occasion to regret it.

CASE LII.—F. McG., twenty-four years of age, while intoxicated was struck on the head and received a compound depressed fracture of the skull; there was no evidence to show how the injury happened. Ether was given; a semilunar incision was made; a button of bone was cut out by the trephine; the depressed bone was

elevated. The fracture was nearly over the right lateral sinus. Much care was needed during the operation in order to keep from injuring the lateral sinus. The handle of the lion-forceps was used as an elevator, the end of it being put under the depressed bone, and the part of it just beyond resting on the sound portion of the skull which acted as a fulcrum. A drainage-tube was used in order to prevent any accumulation of blood under the sutured scalp. This patient was admitted January 28, 1892, and was discharged February 22d, the recovery being quite complete.

CASE LIIL.—C. N., a sailor, aged twenty-six years, fell upon the outer aspect of his left arm and shoulder; and on January 29, 1892, one week after the accident, was admitted to the College Hospital, having a sub-coracoid dislocation of the left humerus, accompanied by paralysis of the musculo-spiral nerve, the wrist-drop being complete. I gave ether so as to cause no additional injury to the nerves, and made the reduction easily by traction and counter-traction. The paralysis was treated by means of electricity for several weeks, without benefit. May 29, 1892, he was acting as orderly in the hospital, where I examined his injured limb. The wrist-drop was still complete, nor could the forearm be extended. The forearm was in a state of pronation. The action of the deltoid appeared to be perfect. Was the musculo-spiral nerve injured by the head of the dislocated humerus? I think not. It was probably injured where it winds around the humerus. It was contused at this point and has not recovered its integrity. Will the paralysis be permanent?

CASE LIV.—P. B., a Swedish sailor, aged eighteen years, came to my clinic, saying he had a needle in his right wrist. On careful pressure with the finger, I could feel a small point of resistance over the front of the base of the radius, between the radial artery and the tendon of the carpo-radial flexor. In this instance a longitudinal incision would be best; so I made one about an inch in length, and found the end of a needle-fragment, which, after some difficulty, I got hold of with the forceps and pulled out of the base of the radius. The fragment was the eye end of the needle, and was only about one-eighth of an inch in length. I need not explain why a V-shaped incision was not made. I have more than once removed needle-fragments from cancellous bone.

CASE LV.—J. H., a laborer, aged——, came to my clinic, with an ankylosed elbow, following a fracture of the external condyle of the humerus, which had occurred six weeks before. The forearm was abducted and fixed about midway between complete extension and right-angled flexion. The limb was in the same atti-

tude in which it had been treated. I gave the patient ether, and, by means of great force, brought the forearm up beyond the right-angled position, binding it there on a splint. The patient complained so much of the pain that the splint was removed, when the forearm resumed nearly the position it was in before the operation. In a few days the patient left the hospital declining to have anything more done.

CASE LVI.—A girl, aged six months, had a *nævus* on the left cheek; it was rapidly enlarging. I ligated by passing, with a curved needle, four ligatures under it, and then tying the ends so as to strangulate the entire mass, which came away in a few days. In this case, the scar became somewhat vascular, and another operation will probably be necessary.

CASE LVII.—Ida R., aged two months, had an extensive fissure of palate and maxillary bones, accompanied by hare-lip. The sides of the fissure in the lip were dissected from the hard parts, and the edges were vivified in the usual way. The projecting intermaxillary bone was forcibly pressed backward so as to make the repaired upper lip as even as possible. There was considerable oozing of blood from the cut surfaces, even after they were sutured together. There was primary union and a good result followed.

CASE LVIII.—On February 3, 1892, same day as previous case, E. F., a five-months-old girl, with a hare-lip, accompanied by fissure of the upper maxillary, came for operation; the steps of the operation were similar to those in the last case. One peculiarity may be noted: This patient had the habit of sucking her thumb; she continued to suck it after the operation; this did not seem to interfere at all with the process of repair. Primary union took place and a good result followed.

CASE LIX.—M. E., a laborer, who had been treated for an oblique fracture of the lower part of the leg until union had taken place, had a sharp point of the upper fragment projecting downward under the fascia and skin in front, with a tendency to work its way through. I made a longitudinal incision down to the sharp projecting end of the fragment, exposed it by careful dissection, and cut it off obliquely with a chisel, so as to make the line of the tibia nearly straight. The result was a kind of compound fracture. I closed the wound entirely with deep sutures and primary union took place. My patient was up in a few days. Judging from cases which I have seen go without such an operation, I should say that my patient was saved several weeks of time. This is an admirable kind of practice, and is further illustrated by the following case:

CASE LX.—J. D., a laborer, aged about forty-seven years, had a very oblique fracture of the leg at the junction of the middle and lower thirds, followed by delayed union. On the 10th of February, there was still some motion at the seat of fracture, and the sharp point of the upper fragment was projecting under the skin in front of the leg. I operated in the same way as in the previous case, obtaining primary union of the soft parts. After the operation the bony repair seemed to go on faster, so that the patient soon got up on crutches.

CASE LXI.—A sailor, aged thirty-three years, had a pleurisy, followed by empyema. On February 10, 1892, I operated in the following manner: After anæsthesia, I cut into the pleural cavity between the fifth and sixth ribs; then pushed the beak of a lithotomy staff inside, and brought the end of it so that it could be felt between seventh and eighth ribs where another opening was made; a strong silk ligature was tied around the neck of beak, and at the same time fastened to the end of rubber drainage-tube; as the staff was withdrawn, the drainage-tube was pulled after it, until one end came out of the upper opening, while the other end was left projecting from the lower one. I do not think exsection of a rib, an operation which I have sometimes performed, is preferable to this operation. The operation by double puncture gives us better control of the drainage-tube, and is performed in less time than the one in which there is exsection of a rib.

CASE LXII.—A ten-year-old boy was playing with a loaded shot-gun, when "it went off" sending the charge into the left knee, making a compound comminuted fracture of the upper end of the tibia and the lower end of the femur, the femur having received the greater injury. The shock was very great, not only from loss of blood, but also from extensive bruising and tearing of the soft parts, as well as from extensive comminution of bone. The shock continued, and it was feared that it might be fatal, since some oozing of blood continued. It seemed to me that the ether might stimulate him, and so it did as soon as he began to feel its influence. I amputated the femur near the middle by transfixion, as rapidly as possible. The ligation of the arteries, the exsection of the end of the sciatic nerve, the introduction of the sutures, and the application of the dressing were very brief. The patient rallied well from the shock of injury and that of operation as well. This patient was admitted to the hospital February 5, 1892, and discharged, recovered, April 1st.

CASE LXIII.—A patient, aged fifty-three years, had cancer of the lower lip, and consented to an operation without an anæsthetic. A

V-shaped piece was cut out of the lip with a pair of angular scissors, going outside of the infected tissue. The sutures operated as ligatures, making complete approximation of the cut surfaces and arresting the flow of blood. Primary union occurred.

CASE LXIV.—A ship's carpenter, aged about thirty-five years, was admitted to the hospital early in February, having a traumatic aneurism of the left radial artery two inches above the wrist-joint. Some months previous to this time a small piece of steel flew from a hammer he was using and made a punctured wound of the artery, the result being a traumatic aneurism of considerable size. The operation consisted in "laying open" the sac and ligating the artery below and above with suture-ligature. The subsequent treatment was that for an open wound. In a short time the cure was complete.

CASE LXV.—J. H., aged thirty-seven years, had a large lipoma on the back just below the base of the neck. The capsule of the growth had to be dissected out. In some locations a lipoma can be easily enucleated. By means of deep sutures, closing up the entire wound, I obtained primary union in a few days. This method is much to be preferred to superficial sutures only, or an open dressing, either of which may require some weeks for the process of repair.

CASE LXVI.—J. K., forty-eight years of age, fell from the hub of his truck and came down upon his left shoulder. Three weeks subsequently, February 18, 1892, he came to the hospital, where an examination showed that he had sustained a dislocation of the left humerus. The signs of contusion were still present. The arm was considerably abducted; it was quite immovable by volition and could not be used. In my attempt to reduce the bone to place, I was assisted by Drs. Burge, Lewis, Cochran and Rogers. After etherization, I broke up the adhesions by manipulation. The bone would not go into place, though we repeatedly used all the force that appeared judicious and safe under the circumstances. The local injury was severe and the patient suffered much shock, and it seemed wise to suspend our work. The question of cutting down upon the head of the bone in order to liberate it was postponed. The patient left the hospital on the 20th, declining further aid.

CASE XLVII.—F. L., aged seventy-one years, February 16, 1892, was sent to hospital for operation on account of strangulated hernia. The history was of hernia coming down from time to time. Reduction had been made by the family physician and also by the patient himself. He was sent to the hospital because the hernia was irreducible. While the usual signs of strangulated hernia

were not present, an operation was thought to be advisable. There was a large tubercular mass involving the structure of the spermatic cord as well as the testicle. On removing it I found that the disease had invaded the various structures of the abdomen, especially the glands. There was no sign of hernia discovered during the operation. In so far as the local conditions were concerned there was marked improvement. But the patient failed slowly, and died on February 29th from exhaustion.

CASE LXVIII.—J. McK., aged twenty years, on February 20, 1892, was brought to my clinic for a swelling in the right inguinal region; it was supposed to be an irreducible hernia. Though I could not find the signs of a strangulated hernia, I operated in the same way I would if there were one. I found a cystic hydrocele of the cord implicating the testicle, and the disease appeared to be of tubercular origin. The walls of the sac were very thick and contained a sero-purulent fluid. I removed the diseased structure in the same way one would exsect the testicle, by ligation as high up as possible. There was no evidence of hernia left. I dressed the wound by packing it with aseptic gauze. This patient made an excellent recovery in about three weeks. Here let me remark that I have obtained primary union after exsection of the testicle by means of deep sutures; in a case like this it seemed to be better to leave the wound open so that it could discharge freely.

CASE LXIX.—In Case XLIV the knee improved, as well as the general condition, for a little time, then the tissues of the knee began to proliferate and the patient began to lose strength. The only chance to save the life of the patient appeared to be in amputation of the limb. On February 22, 1892, I amputated the thigh in the upper part of the middle third. The stump healed rapidly and the general improvement was very marked, yet in a few weeks, the disease of the lungs went on somewhat rapidly, and death followed from exhaustion.

CASE LXX.—This patient had already had an operation, which has been noted under the head of Case LX. Another sharp point of bone became prominent under the skin. An operation similar to the other was performed and the result was excellent.

CASE LXXI.—A sailor, about twenty-seven years of age, had a general enlargement of the left shoulder. It was impossible to say what was the exact nature of the pathological change. I introduced the exploring needle at several points; I did not find pus, nor did the bone appear to be changed in form and structure. The only thing to do was to wait for further developments. In the meantime, the patient was sent home, he being a foreign seaman.

CASE LXXII.—E. R., a sailor, aged nineteen years, was admitted to the College Hospital, February 24, 1892, with an extensive compound fracture of the lower end of the right humerus; the accident occurred two weeks prior to admission. He said the captain of his ship removed a large piece of bone at the time of the accident. On the day of his coming to the hospital I found the end of a piece of bone projecting from the wound. The soft parts were very much swollen and infiltrated with pus; it was a case of septic wound. I gave the patient ether, enlarged the wound, washed out the cavity, and removed a piece of bone nearly four inches in length and about one-half the thickness of the entire bone. As to what bone was left: The lower end of the upper fragment was pointed and about one-half of the entire bone; the lower fragment was also pointed at its upper end, but less of the bone had been broken off. The broken ends could not be brought into desirable coaptation; I put them in the best relation possible, then I put the limb upon a double-angled splint, made of wire-cloth. It was disinfected every day and replaced upon the splint. In about six weeks there was firm union, though the callus was very abundant. There was good motion at the elbow-joint, the forearm flexing and extending not quite completely. The arm was about two inches shorter than the other. It is a matter of interest to state that this patient fell and refractured the humerus twice, and each time there has been good repair and a useful limb has been obtained.

CASE LXXIII.—A young man, about twenty years of age, had a pistol-shot wound of left elbow and refused to tell how the accident happened. It appeared as if the elbow-joint had been penetrated. An incision disclosed the fact that the ball had lodged in the bone of the ulna. A few cuts with the chisel enabled me to lift the ball from its bony bed. The joint had not been penetrated. The case made a rapid recovery.

CASE LXXIV.—A laborer, aged thirty years, came into the hospital with an inflamed hand. In such a case I use an exploring needle to see if there is pus. The exploring needle demonstrated the existence and the location of pus. An incision was followed by rapid improvement; the usefulness of the hand was restored.

CASE LXXV.—Florence E., aged five years, had spondylitis in the dorso-lumbar region, accompanied by curvature of the spine. In this case several attempts to apply a spinal jacket had failed. The process was as follows: One nurse supported the upper part of the body of the patient and another nurse supported the lower part, both being seated in chairs a little distance apart. A light

plaster jacket was then put on by Dr. Cochran. The little patient was greatly relieved, the jacket being a decided success.

CASE LXXVI.—A woman, about forty years of age, had an angular curvature of the lower part of the dorsal spine of some years' standing. The patient was daily suspended by the armpits, the pully being fastened to a high saw-horse, instead of a tripod. A plaster jacket was applied by Dr. Gardiner. The patient was greatly relieved.

CASE LXXVII.—A man, aged forty years, had large and troublesome varicose veins of the right leg. The veins were exposed by incision and ligated with catgut. The wounds were sutured. The repair took place in a few days. Antiseptic principles has made it possible to operate on varicose veins. Invariable success has followed in my cases.

CASE LXXVIII.—F. A., aged eighteen years, had a hydrocele of the right side of the scrotum. It had been tapped several times. I opened the sac, evacuated the fluid, washed out the cavity with an aseptic solution, and packed the wound with iodoform-gauze. The serous surface granulated, and in about three weeks the cavity was obliterated, bringing about a radical cure.

CASE LXXIX.—M. H., aged forty-three years, had been troubled with hæmorrhoids for several years; at times they bleed profusely; often they were very painful. I performed the operation of ligation; it is safe; it leaves a minimum of scar tissue. Sometimes the patient suffers pain after the operation; this is caused for the most part by neglect to remove the hairs. At any rate, the pain can be controlled by opiates. The patient was well in a few days.

CASE LXXX.—A laborer, about twenty-six years of age, had a growth rapidly form on the right leg, involving the tibia, the muscles and the fascia; the time of development had been only a few months. A diagnosis of osteo-sarcoma was made and amputation advised. At the time of the operation I incised the growth and the appearance confirmed the diagnosis. Then I amputated at the knee-joint, according to the method proposed by myself. This operation has been already described in several medical journals. The patient made a speedy recovery. This patient more properly belongs with those I operated upon during the reading term, but I will let it be published here.

